BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: August 23, 2006
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Bob Aubrey
Wayne Clifford
Jon Evans
Cathy Goodmen
Jeff Harping
Bill Hauser
Bob Juliano
Bob Landry
Kirk Mudgett
Tobey Reynolds
Kelsey Thomas
Matt Urban
Alex Vogt

Federal Highway Administration
Bill O'Donnell

Army Corps of Engineers
Rich Roach

NH DES
Steve Couture
Gino Infascelli
Lori Sommer
Harry Stewart

NH Fish and Game
Dan Lynch
Kim Tuttle

EPA
Mark Kern

NHOEP
Jennifer DeLong

US Fish and Wildlife Service
Bill Neidermyer
Anthony Tur

VHB
Jennifer Hogan

FAA
John Silva

FST
Peter Howe

Manchester Airport
Rich Fixler
John Hagopian

The Smart Associates
Glenn Smart

NOTES ON CONFERENCE:

Alstead, X-A000(472), 14541I
Jon Evans and Bob Landry began by reviewing the project limits and scope of work. This project involves the reconstruction of a flood-damaged section of NH Route 123 on new alignment beginning approximately 1,500 feet west of Cobb Hill Road, continuing 2,500 feet east. In addition the culvert (BR #097/142) that carries Mad Brook under NH Route 123 will be replaced.

Jon indicated that Sean Sweeney of Horizons Engineering is continuing to develop the River Restoration Plan for the Cold River, Bowers Brook and Warren Brook. Although the River Restoration Plan has not been fully developed, Sean has been able to give several preliminary indications of what the plan will likely include. Included in these indications is his potential recommendation to raise the current elevation of Warren Brook to its approximate pre-flood height. Jon indicated that this possibility had been discussed at several previous meetings with DES and NH F&G but it appeared that there was still some confusion as to how to proceed.

Bob Landry explained that the proposed Mad Brook culvert would be 10 feet tall, 12 feet wide and 30 feet long and is approximately 2 feet above the existing streambed elevation of Warren Brook. Both Bob Landry and Bob Aubrey expressed concern that should the proposed invert elevation be maintained, and the

streambed of Warren Brook raised to its pre-flood elevation, it would constrict the outlet flow to an unacceptable level.

Steve Couture explained that it was his recollection from several previous meetings between NHDOT, F&G and NHDES that the box culvert would be designed at a slightly higher elevation in order to allow for future adjustments in the Warren Brook streambed elevation. Since it appears that the recommendation to raise the brook elevation will be made, it was suggested to raise the outlet approximately 2 to 3 feet.

It was then noted that this would further necessitate the use of step pools to temporarily allow for fish passage up Mad Brook. In talking with Sean Sweeney, Jon said that the ideal step pool length would be approximately two times that of the bank full width and a step no greater than 18 inches. Since space in this area is a concern Sean's suggestion was to design the pools in whatever way possible while still maintaining no more than an 18 inch jump from one pool to the next.

Jon indicated that in talking with Sean Sweeney he strongly suggested against adjusting the Mad Brook elevation upstream from the culvert. Sean felt that adjusting this elevation would destabilize both the banks and channel resulting in erosion further upstream. Given this comment, both Steve and Bob Aubrey suggested raising the elevation of the entire culvert to allow for less impact upstream.

Jon noted that there had been some confusion as to where Class A and Class B stone would be placed and the limits of humus. Bob Landry explained that the current design called for Class A stone up to the Q100. Above the Q100 would be Class B stone to the top of the slope with humus and vegetation. Both Kim Tuttle and Gino Infascelli inquired as to whether it would be possible to move this line down to the Q50. Tobey Reynolds indicated that the difference between the Q50 and the Q100 is only about a half a foot. Jon also stated that Sean expressed concerns that should the streambed be raised in this area, the Class A stone would no longer go high enough to provide protection for a Q100 storm. Both Tobey and Bob Landry felt that the class A stone should be brought up 3 feet to allow for proper protection of the embankment upon raising the Warren brook elevation. It was noted that this would be an appropriate approach.

This project was previously reviewed on the following dates: 3/15/06 & 5/17/06

Alstead, X-A000(473), 14541J

Jon Evans and Bob Landry began by reviewing the project limits and scope of work. This project involves the reconstruction of a flood damaged section of NH Route 123 beginning at the intersection of NH Route 12A & Griffin Hill Road, proceeding west to a point approximately 1,000 feet west of the NH Route 123A intersection. Bob Landry noted that the Department is limited in what it can do along several roadway sections directly adjacent to Warren Brook as there is a steep hill on the opposite side. This includes the area of alternating one-way traffic. The intent in this area is to leave the existing retaining wall and develop a way to tow in the existing riprap.

Bob also noted that the majority of the right-of-way impacts are situated at the eastern end of the project in the area of the NH Route 12A intersection. The current design in this area involves shifting the roadway to the north to allow for the construction of a new bridge over Warren Brook. The current bridge is insufficient to handle anything more than a ten-year flood event and therefore needs to be replaced with a larger structure. The northern side of NH Route 123 along this section of roadway previously contained several structures that were completely destroyed during the flood event.

Relocating this section of roadway will involve placing fill closer to Warren Brook and possibly into the floodplain. Bob asked Jennifer DeLong if she felt this shift would in-fact impact the floodplain. Jennifer felt that it was a possibility but that it did not appear to be a considerable impact. Bob indicated that the Department would coordinate further with her and the other resource agencies once design progresses. No one objected to the approach the Department was taking relative to this issue. *A subsequent meeting with NHOEM, USGS and FEMA provided the Department with guidance on this issue and confirmed that the Department's approach is appropriate.*

This project was previously reviewed on the following dates: 3/15/06

Hinsdale, X-A000(426), 14540N

Jon Evans and Bob Landry began by reviewing the project limits and scope of work. This project involves the reconstruction of a flood-damaged section of NH Route 63, beginning approximately 1,300 feet north of the NH Route 119 intersection, continuing north several thousand feet.

Bob noted that a small section of slope located approximately 3,000 feet north of the NH Route 63/119 intersection is of particular concern. This slope is located adjacent to the downstream wing wall of bridge 114/118. This has severely threatened the integrity of the roadway as well as the bridge itself. Bob noted that the Bureau of Bridge Maintenance is looking at trying to stabilize this slope prior to the upcoming winter maintenance season.

This bridge also contains a spillway which is showing signs of scour at the outlet end. Bob indicated that we would likely be attempting to stabilize the pool at the outlet end to prevent further undermining of the spillway. This will likely involve the placement of stone fill within the stream channel, but would not impact the natural berm located along the northwestern embankment.

Kim Tuttle noted that in the past NHF&G stocked a lower reach of Kilburn Brook near the proposed road repairs with Atlantic Salmon fry. An electrofishing survey conducted later in the summer revealed good survival despite very low water levels indicating a good coldwater temperature profile for this stream. She requested that the Department do as much as possible to maintain the existing shady vegetation. Dan Lynch also noted that since this stream was of particular importance to NH F&G he would have John McGee contact Jon Evans for further coordination.

This project was previously reviewed on the following dates: 3/15/06

Bedford-Manchester-Londonderry, DPR-F-0047(001), 11512 Manchester Airport Access Road

Pettingill Road Wildlife Crossing: Alex Vogt reviewed the proposed location of the wildlife corridor to cross Pettingill Road. The Town of Londonderry and the Department prefer to have the stream cross westerly of the existing location as it will make a better Pettingill Road design, stream design and have less right-of-way costs. The existing stream is in a man made ditch. A field visit of the site was held on July 28 after which it was agreed that it is acceptable to shift the corridor to the west of the existing drainage ditch. Mark Kern expressed concern with the existing detention basins within the proposed 200' wide corridor. Mark Kern felt that the 200' wide corridor should be fully vegetated. Alex Vogt questioned why the detention basins could not be included in part of the corridor as they will become vegetated and provide a buffer. Alex Vogt stated that the corridor restoration would not provide a full 200' of woods. Rich Roach agreed with Mark Kern that the detention basins need to be outside the corridor. Eventually trees will

vegetate the whole 200'. Outlets from the detention basins would be allowed within the 200' easement buffer area so that water could feed the stream. The acquisition of the western corridor will proceed. Relocation of the detention ponds will be negotiated with the current landowner. Details of the stream restoration including plantings will be submitted for review.

Merrimack River Bridge drainage: Alex Vogt stated that the plans for the Merrimack River Bridge are being finalized. One of the wetland permit conditions is that the proposed bridge structure over the Merrimack River will be designed with a closed drainage system to limit water quality impacts to the River. At a previous meeting, around November 2004, the need for a closed drainage system on the 10' wide path portion of the bridge was discussed. At that time it was amenable to allow the path drainage to dump into the river directly, however at that time additional information was requested. Alex Vogt reviewed the current plans that show approximately 600' of path would have 4 scuppers that would drop drainage directly into the river. The maximum flow of these scuppers would be 0.23 cfs. All the roadway runoff that would have oils and grease would be picked up by the closed roadway drainage system, and taken off the bridge into a treatment area. The path would be winter maintained by the City of Manchester or the Town of Bedford. It is unknown what the City or Town would do for winter maintenance or if they would use any sand and salt. Lori Sommer suggested that a letter be written to Paul Piszczek, Watershed Management Bureau, NHDES to determine if allowing the path drainage to drop directly into the Merrimack River would have a significant impact to the Merrimack River as this is a water quality issue. *Following the meeting, a letter was sent to Paul Piszczek at NHDES. He responded that the proposed open-drainage design for the pedestrian/bike path is appropriate.*

This project was previously reviewed on the following dates: 11/14/96, 4/16/97, 5/28/97, 8/20/97, 12/16/98, 1/20/99, 10/20/99, 12/15/99, 2/16/00, 3/22/00, 6/14/00, 3/21/01, 4/18/01, 1/16/02, 8/21/02, 6/18/03, 3/24/04, 7/21/04, 9/15/04, 10/20/04, 12/15/04, 9/21/05, 3/15/06 & 5/17/06

Bedford-Manchester-Londonderry, DPR-F-0047(001), 11512 Manchester Airport Access Road

Cathy Goodmen presented this surplus land. Stonyfield Farms Inc. has requested to purchase a portion of a parcel that the NHDOT acquired for the wildlife corridor required for the Airport Access Road project, Bedford-Manchester, 11512. This parcel was determined by the NHDOT to be surplus to the needs of the wildlife corridor. The information was sent to the NH Natural Heritage bureau, which determined that the parcel is New England Cottontail habitat and this species was sighted within a mile of the parcel in 2002. The New England Cottontail is a NH threatened species and will probably be listed on the NH endangered list at the next review.

All the representatives of the regulatory agencies at the meeting oppose the sale of this parcel due to the presence of the New England Cottontail and previous agreements with Stonyfield to preserve habitat for the New England Cottontail.

This project was previously reviewed on the following dates: 11/14/96, 4/16/97, 5/28/97, 8/20/97, 12/16/98, 1/20/99, 10/20/99, 12/15/99, 2/16/00, 3/22/00, 6/14/00, 3/21/01, 4/18/01, 1/16/02, 8/21/02, 6/18/03, 3/24/04, 7/21/04, 9/15/04, 10/20/04, 12/15/04, 9/21/05, 3/15/06 & 5/17/06

Manchester-Boston Regional Airport, *No NHDOT Project Number*
No Minutes Prepared. For information on this project, contact Peter Howe at FST, Inc.